

These instructions were tested and developed for replacing windows in wood-frame wall construction systems designed to manage moisture. Installation recommendations for other types of wall construction, wall systems or conditions, may be obtained from Pella Corporation or a local Pella retailer. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and additional care on your part. Determining the appropriate installation method is the responsibility of you, your architect, or other construction professional.

YOU WILL NEED TO SUPPLY:

- Cedar or Impervious shims/spacers (12 to 20)
- Closed cell foam backer rod/sealant backer (12 to 30 ft.)
- Pella<sup>®</sup> SmartFlash<sup>™</sup> foil backed butyl window and door flashing tape or equivalent
- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant (1 tube per window)
- Low expansion, low pressure polyurethane insulating window and door foam sealant. DO NOT use high pressure or latex foams
- #8 x 3-1/4" Finish head screws (6 to 10 per window)

Installation will require two or more persons for safety reasons.

#### REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

This method of installation involves removing the sash only of the existing window. The original window frame will remain in place and only the existing sash, frame stops and frame hardware must be removed.

CAUTION: Many windows in older homes are painted with lead-based paint. Removal of old windows may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities for more information.



**2010** Always read the Pella<sup>®</sup> Limited Warranty before purchasing or installing Pella products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. Failure to comply with all Pella installation and maintenance instructions may void your Pella product warranty. See Limited Warranty for complete details at *http://warranty.pella.com*.

TOOLS REQUIRED: • Tape measure • Level • Sealant gun • Prybar • Utility knife • Hammer • Screwdrivers (Flat & Phillips) • Adjustable pliers • Side cutters • Side cutters • Roto-tool, reciprocating saw • Wood chisel • 1/8" drill bit • Drill

## REMOVE THE EXISTING SASH

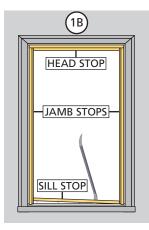
Note: Remove the new window from its packaging. Inspect and measure the new window to confirm it will fit into the opening prior to removing the existing window.

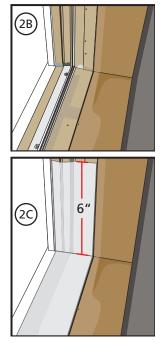
- A. Remove the existing sash. This will vary per manufacturer of the existing window. Removing the hinge and operator fasteners will generally allow the sash to be removed from the existing frame.
- B. Remove operator hardware and all head, jamb, and sill stops. This can usually be accomplished with a prybar.

## **2** OPENING PREPARATION

- A. **Inspect the existing window frame** and repair or replace any defective or rotted wood parts. Remove or seat any nails.
- B. Clean the opening of any dirt, debris, or excess old paint before proceeding. Chisel off any high spots.
- C. **Apply one piece of sill flashing tape to the sill** of the existing window frame. Cut the tape 12" longer than the existing window sill width. Apply the tape on the existing sill 6" up each jamb and press down firmly. The tape will not cover the sill depth completely under the new window.
- D. Install and level sill spacers. Place 1" wide by 3/8" thick spacers on the bottom of the window opening 1/2" from each side and 1/2" back from the interior surface of where the new window will rest. Spacers are also required at points where windows are joined in multiple window combinations. Add shims as necessary to ensure the spacers are level.

Note: Improper placement of shims or spacers may result in bowing the bottom of the window.



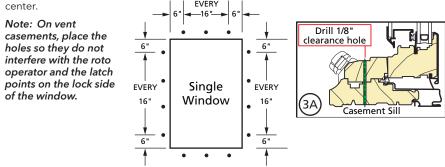


TWO OR MORE PEOPLE ARE REQUIRED FOR THE FOLLOWING STEPS.

# **3** WINDOW PREPARATION

#### A. Casement:

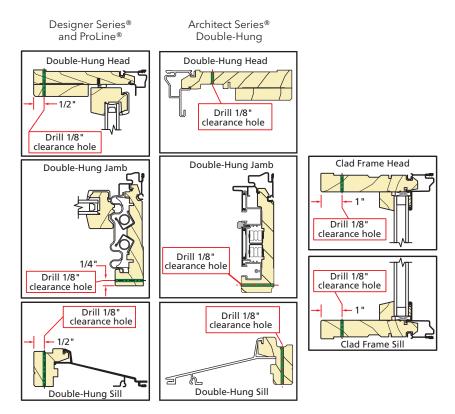
On the room side of the window drill 1/8" diameter clearance holes through the head, jambs and sill of the frame. Space the holes a maximum of 6" from each end and a maximum of 16" on



#### B. Double-hung and Clad Frame:

On the room side of the window, drill 1/8" diameter clearance holes through the frame at the locations shown. Space the holes a maximum of 6" from each end and a maximum of 16" on center.

### Note: The lower sash must be raised to drill the holes in the sill of the double-hung window.



## **4** SETTING AND FASTENING THE WINDOW

#### TWO OR MORE PEOPLE ARE REQUIRED FOR THE FOLLOWING STEPS.

Note: Because there are no stops in the opening to place the window against, be sure to hold the window in place when performing Steps 4A thru 4C.

A. **Insert the replacement window in the opening** by first placing the bottom of the window on top of the shims on the sill of the opening. Tip the window upright into the opening.

Note: Use of a suction cup on the glass will assist in handling the window.



Note: Each existing window frame and wall depth will vary in different applications; therefore there is not a standard measurement for the overhang of the window frame to the exterior or for the distance from the interior face of the window to interior trim. When performing Steps 4B thru 4C, installing the frame screws, be sure to keep the distance consistent all around the window.

Note: On the exterior, there must be enough room for backer rod and 3/8" sealant bead.

B. Place shims aligned with the top pre-drilled hole in one jamb of the window frame. Keep shims back 1/2" from interior face of window. Partially insert one 3-1/4" finish wood screw. Repeat on the other jamb.

Note: Position the shims to ensure they allow at least 1/2" from the exterior surface of the window to allow for placement of backer rod and sealant.

C. **Continue placing shims at each pre-drilled hole as needed** to plumb and square the window. Check the window for square by making sure the diagonal measurement from corner to corner of the replacement window is within 1/8" in both directions. Insert a 3-1/4" finish wood screw into each pre-drilled hole in the frame. Finish inserting the top screw in each jamb.

Note: DO NOT shim above the window. DO NOT over shim.



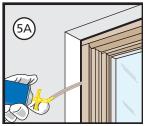




## **5** INTERIOR SEAL

CAUTION: Ensure use of low pressure polyurethane window and door insulating foams and strictly follow the foam manufacturer's recommendations for application. Use of high pressure foams or improper application of the foam may cause the window frame to bow and hinder operation.

A. Apply insulating foam sealant. From the interior, insert the nozzle of the applicator approximately 1" deep into the space between the window and the rough opening and apply a 1" deep bead of foam. This will allow room for expansion of the foam and will minimize squeeze out. Apply sealant across interior surface of shims to create a continuous seal. For windows with jamb extensions installed, ensure the foam is placed between the window frame and the rough opening, not between the jamb extension and the rough opening. Follow foam manufacturer's instructions.



B. Check the window operation (vent units only) by opening and closing the window.

Note: If the window does not operate correctly, check to make sure it is still plumb, level, square, and the jambs are not bowed. If adjustments are required, remove the foam with a serrated knife. Adjust the shims and reapply the insulating foam sealant.

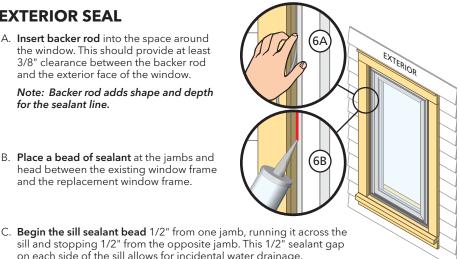
Interior Finish or Trim: The space between the new window and the existing window's frame will need to be covered with trim. There are many ways to accomplish this and each case can be unique. How this is done will be the decision of the homeowner or window installer. A few possibilities include using cove, guarter round, or a stop moulding.

## **6** EXTERIOR SEAL

A. Insert backer rod into the space around the window. This should provide at least 3/8" clearance between the backer rod and the exterior face of the window.

Note: Backer rod adds shape and depth for the sealant line.

B. Place a bead of sealant at the jambs and head between the existing window frame and the replacement window frame.



- sill and stopping 1/2" from the opposite jamb. This 1/2" sealant gap on each side of the sill allows for incidental water drainage.
- D. Shape, tool, and clean excess sealant. When finished, the sealant should be the shape of an hourglass.

Note: This method creates a more flexible sealant line capable of expanding and contracting.

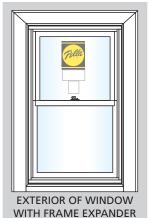
### EXTERIOR FINISH OF EXISTING FRAME

The exposed wood and flashing tape on the exterior stop needs to be covered/protected. There are many ways to accomplish this, and each case can be unique.

A few possibilities include:

- a) Covering the existing trim with aluminum coil wrap/ frame expander.
- b) Sanding, priming and painting to match existing trim.
- c) Covering the exposed wood with a high quality exterior grade sealant.

Note: The contractor/installer will determine how to finish the exterior.



#### EXTERIOR FINISH OF ALUMINUM CLAD WINDOWS

The exterior frame and sash are protected by aluminum cladding with our tough EnduraClad® or EnduraClad Plus baked-on factory finish that requires no painting. Clean this surface with mild soap and water. Stubborn strains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Use of inappropriate solvents, brickwash or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

### **INTERIOR FINISH**

If products cannot be finished immediately, cover with clear plastic to protect from dirt, damage and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust.

Pella products must be finished per the below instructions; failure to follow these instructions voids the Limited Warranty.

- On casement and awnings, it is optional to paint, stain or finish the vertical and horizontal sash edges.
- On single-hungs and double-hungs, do not paint, stain or finish the vertical sash edges; any finish on the vertical sash edges may cause the sash to stick. It is optional to paint, stain or finish the horizontal sash edges.
- On patio doors, it is optional to paint, stain or finish the vertical and horizontal panel edges.

#### Note: To maintain proper product performance do not paint, finish or remove the weatherstripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting windows and doors to dry completely before closing them.

Pella Corporation is not responsible for interior paint and stain finish imperfections for any product that is not factory-applied by Pella Corporation. Use of inappropriate finishes, solvents, brickwash, or cleaning chemicals will cause adverse reactions with the window and door materials and voids the Limited Warranty.

For additional information on finishing see Pella Owner's Manual or go to **www.pella.com.** 

### CARE AND MAINTENANCE

Care and maintenance information is available by contacting your local Pella retailer. This information is also available at **www.pella.com.** 

### **IMPORTANT NOTICE**

Because all construction must anticipate some water infiltration, it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella\* products in accordance with Pella installation instructions; or the use of Pella products in wall systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems, (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah, and Colorado, **Pella makes no** warranty of any kind and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella products in barrier wall or similar systems must be in accordance with Pella installation instructions.

Product modifications that are not approved by Pella Corporation will void the Limited Warranty.

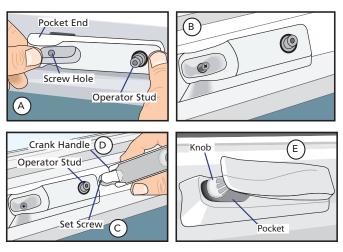
### INSTALLING ROTO COVER AND CRANK

Note: Finish the interior of the window and allow the window to dry before proceeding with these instructions. (To open the window for finishing, partially insert the lock handle into the jamb, unlock the unit, temporarily attach the crank handle and turn to open.)

A. Place the cover over the operator stud and snap into place. Position the pocket end of the cover into place.

Note: If the cover does not have the screw hole, apply pressure on the pocket end of the cover to snap the cover into place and proceed to step C.

B. Insert the provided screw into the hole in the bottom of the pocket. Use a # 1 Phillips screwdriver to secure the pocket screw snug against the bottom of the pocket to avoid



scratching the crank handle knob. DO NOT over tighten.

- C. Use a medium size flat-blade screwdriver to loosen the set screw in the crank handle.
- D. Slide the crank handle onto the stud. Unlock, open window, then close and lock window.
- E. Fold the crank handle down and check alignment of knob with the pocket.

Note: You may need to adjust the crank position on the stud until the correct alignment is achieved.

- F. Open the crank and tighten the set screw.
- G. After the final installation, fold the crank over and snap the knob into the pocket.

Note: Even with the window open the crank can be folded to avoid interferring with the window treatments.

### LOCK LEVER REMOVAL AND INSERTION

Note: You may want to remove the lock lever prior to finishing the window, or if it needs to be replaced with a lock lever in a different finish.

- A. Unlock and open the window.
- B. Place the lock lever in the locked position.
- C. From the exterior of the window, insert a small flat-blade screwdriver between the cam and lock lever near the bottom of the opening between the stop and frame gasket.
- D. **Push the screwdriver inwards** with a small amount of pressure; then turn the blade slightly clockwise for a left hand unit, counter-clockwise for a right hand unit. **DO NOT** over-twist the screwdriver, this can damage the lock driver.

Note: This will release the hook in the lever from the cam hook.

- E. **Remove the lock lever** by pulling it toward the interior of the building.
- F. To install a lock lever, hold it in the lock position and insert it, from the interior, into the slot until it snaps into the cam.

